

EXPANDED ENERGY RECOVERY OPTIONS

Valent's broad range of air-to-air energy recovery methods provide options for owners, engineers, and contractors to meet the needs of diverse applications.



BENEFITS

- Reduced cooling, dehumidification, and heating loads through integral air-to-air energy recovery
- Better match to the application through the ability to select from one of three methods of energy recovery
- Improved owner satisfaction by using an energy recovery technology suited to their needs and preferences
- Reduced installed cost compared to systems designed with separate packaged rooftop and energy recovery ventilator

APPLICATIONS

Enthalpy Wheel

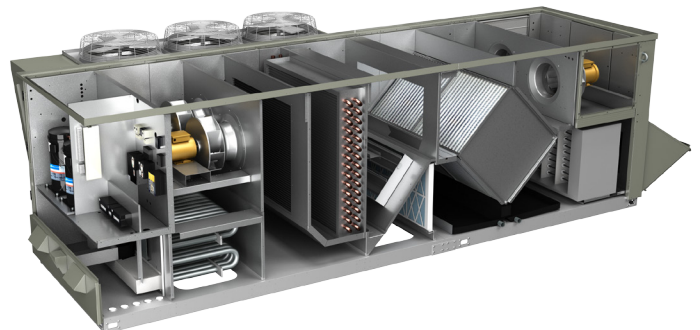
The rotating enthalpy wheel is intended for use in high-outdoor air applications with relatively large cooling and dehumidification loads. Operating with a small amount of leakage between the outdoor and return air streams, enthalpy wheels are best suited for general ventilation applications with relatively clean return air.

Enthalpic Core

The enthalpic core heat exchanger excels in the same applications as an enthalpy wheel but offers two distinct advantages; very little cross contamination between the return and outdoor air streams and the elimination of rotating parts. These benefits are helpful in designs where return air leakage is undesirable or when a building will operate with limited maintenance staff.

Sensible Flat Plate

Transferring only sensible energy with very low leakage, the flat plate heat exchanger is useful when designing in arid climates or in situations where the indoor space has high levels of moisture — such as a locker room. Similar to the enthalpic core, the flat plate heat exchanger has no moving parts and thus has reduced maintenance requirements over devices like energy recovery wheels.



FEATURES

VPRE

- Integral enthalpy wheel providing sensible and latent heat transfer between airstreams
- Available with one of two wheel types to best suit each project
 - Polymer media with silica gel desiccant
 - Aluminum construction with molecular sieve
- Options
 - Variable speed drive for economizing and frost elimination
 - Electric preheat on outdoor air intake for cold climates

VPRC

- Enthalpic core transferring both sensible and latent energy
- Polymer media can be washed with water and withstand freezing without degradation
- Integral floor drain pans to collect and remove condensate as well as water used for cleaning
- Options
 - Face-and-bypass dampers for economizing and frost elimination
 - Electric preheat on outdoor air intake for cold climates

VPRP

- Sensible plate providing no moisture transfer between airstreams
- Aluminum plates transfer heat with minimal resistance reducing pressure losses
- Face-and-bypass damper arrangement for economizing and frost elimination
- Integral floor drain pans to collect and remove condensate as well as water used for cleaning
- Option
 - Electric preheat on outdoor air intake for cold climates

AIRFLOW CAPACITIES

AIRFLOW CAPACITIES		Nominal Airflow [CFM]														
		650	1,000	1,500	2,000	3,000	4,000	5,000	7,500	10,000	12,500	15,000	17,500	20,000	22,500	
	VPRE															
	VPRP															
	VPRC															

Airflow capacities are based on heat exchanger capability; overall unit airflow may be limited by other factors including cooling type, heating type, or design conditions.



Contact your Valent representative today for more information.

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THE VALENT ADVANTAGE

Valent Air Management Systems is a manufacturer of highly-configurable air handling equipment designed to meet the needs of engineers, contractors, and building owners. At our core is a commitment to initial quality, long-term reliability, application flexibility, and dedicated product support.

Valent is a business of Unison® Comfort Technologies.

